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Tri Hita Karana as the Spirit of Sustainable Development: Integration of the Welfare State and Pentahelix Collaboration in Indonesia

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Abstract

Balancing economic growth with social equity and ecological integrity remains a central challenge for sustainable development in Indonesia, especially in tourism-intensive regions. This study examines how the Balinese philosophy of Tri Hita Karana (parahyangan, pawongan, palemahan) can integrate ethically welfare-state responsibilities with pentahelix collaboration to improve water and environmental governance. We employ an interpretive, qualitative case-study design in Bali, combining document analysis, semi-structured interviews, and field observations. Three interrelated cases are analysed: the Subak irrigation system, water-energy security initiatives, and tourism-driven development. Thematic analysis is guided by Tri Hita Karana's spiritual, social-institutional, and ecological dimensions. Across cases, collaboration among government, business, academia, civil society, and media is more effective and socially legitimate when explicitly anchored to Tri Hita Karana values. Field evidence indicates that incorporating sacred sites and customary water rights into spatial planning increases local consent and regulatory compliance; conversely, tourism-led projects that neglect these values are associated with diminished local water access, weaker monitoring, and enforcement gaps. Subak-based practices demonstrate how community governance and spiritual-ecological norms stabilise allocation and reduce conflict, while document reviews show that welfare-state instruments remain underutilised for ecological protection when policy is narrowly framed as service delivery rather than ecological stewardship. Embedding Tri Hita Karana within welfare-state and pentahelix arrangements reframes development from technocratic provision to relational sustainability, supporting policies such as spiritual-ecological zoning, participatory environmental audits, and polluter-pays enforcement that safeguard socio-ecological balance in Bali.

Keywords

Tri Hita Karana; Pentahelix; Welfare state; Ecological justice; Water governance

Introduction

Development aims to enhance human welfare, social progress, and civilization (Anand and Sen, 2000; Max-Neef, 2017; Midgley, 1995; Santos, 2010; Sen, 1999). Contemporary development paradigms remain strongly shaped by capitalist logics that prioritise profit and accumulation and capital accumulation (Feola, 2020; Sanyal, 2014; Stiglitz, 1998). This focus has led to the oversight of alternative objectives or interests, particularly in the realm of environmental sustainability. The notion of sustainable development was established to reconcile the objectives of development with sustainability, while also evaluating environmental sustainability within a long-term perspective. In this context, short-term gains are insufficient indicators of sustainability (Alamoush, Ballini and Ölçer, 2021; Brandon and Lombardi, 2010; Javanmardi *et al.*, 2023).

In Indonesia, sustainability is formalised through national regulations, including Presidential Regulation No. 59/2017 on SDG implementation, incorporating the principles of environmentally-friendly practices, as outlined in Presidential Regulation No. 59 of 2017 regarding the Implementation of Development Goals (Morita *et al.*, 2020; Sari *et al.*, 2022; Seftiani *et al.*, 2025). This development framework is fundamentally anchored in three essential pillars: economic growth, environmental preservation, and social justice, which must consistently underpin all development efforts (Mensah, 2019; Murphy, 2012; Purvis *et al.*, 2019). Nonetheless, achieving sustainable development in Indonesia requires integrating welfare-state principles with pentahelix collaboration to guarantee community welfare and the conservation of natural resources. The welfare state underscores the government's responsibility to ensure social justice and provide access to essential needs. In contrast, pentahelix collaboration highlights the interdependent roles of five key elements: the government, academia, the community, business actors, and the media. Furthermore, it is essential to consider the presence of local wisdom values to achieve comprehensive sustainable development (Natalis *et al.*, 2025).

Poorly planned infrastructure development often generates environmental and social risks. This situation may pose challenges to community access to water resources. Furthermore, extensive infrastructure development frequently overlooks the fundamental rights of the community regarding access to resources. The development of hotels, particularly in tourist regions like Bali, necessitates a significant water demand, thereby complicating access to water resources for the local population. The availability of clean water for local communities has diminished, particularly in areas with high tourist density. This situation illustrates that while infrastructure development has produced economic advantages, it has concurrently undermined the fundamental rights of local communities. Environmental justice demands equitable access to a healthy environment and protection from harmful development impacts, and to be protected from the adverse impacts of industrial or developmental activities. Environmental justice encompasses equitable consideration in the formulation of policies that influence the environment (Bullard, 2018; Ikeme, 2003; Schlosberg, 2007; Walker, 2012).

The welfare state encompasses the idea of wealth distribution aimed at ensuring access to essential services, which in turn enhances the overall welfare of its citizens (Garland, 2014; Hemerijck, 2013; Wahl, 2011). Simultaneously, tourism significantly enhances the economy through job creation, tax revenue, and financial support for cultural and

environmental initiatives. Effective public infrastructure addresses local needs and enhances the overall tourism experience by integrating security systems, medical facilities, and transportation options. This type of infrastructure, often associated with the welfare state, illustrates the shared benefits accessible to both citizens and visitors. Additionally, tourism plays a direct role in supporting welfare initiatives. Taxes generated from entrance fees at tourist attractions or hotel accommodations can be allocated towards social or environmental initiatives. This establishes a beneficial cycle: tourism supports social services, which in turn contribute to a well-functioning and healthy community that draws in additional visitors.

Implementing welfare-state principles requires coordination among multiple stakeholders. The Pentahelix framework represents a multi-stakeholder paradigm that incorporates five fundamental elements: government, business, university, community, and media (Calzada, 2020; Pratiwi *et al.*, 2025). Carayannis and Campbell (2010) augmented this model by incorporating a fifth helix that signifies the natural environment (social ecology), thereby emphasising the essential importance of ecological equilibrium in socio-economic innovation. The Pentahelix strategy promotes sustainable development by improving synergy, efficacy, and community resilience via cross-sector collaboration. It highlights the convergence of academic expertise, industrial collaborations, and community engagement in developing innovative approaches for the sustainable management of environmental resources.

The situation in Bali, specifically in the Nusa Dua area, exemplifies the application of collaborative frameworks to address pressing issues in energy security and water management. The Balinese government has promoted the initiatives of *Bali Mandiri Energi* (Bali Energy Independence) and *Bali Energi Bersih* (Bali Clean Energy) to attain sustainable energy objectives. A significant milestone in this initiative is the establishment of a 100 kWp floating solar power plant at the Muara Nusa Dua Reservoir. This project exemplifies the collaboration between the state-owned electricity firm, State Electricity Company, and the Bali Provincial Government to expedite the adoption of renewable energy and achieve energy independence for the island (Natalis *et al.*, 2025).

The Subak system, recognised by the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) as a cultural treasure of Bali, exemplifies the Tri Hita Karana concept, which fosters harmony among individuals, nature, and spirituality. This concept provides a foundational paradigm for sustainable water governance. During the 10th World Water Forum in Nusa Dua (May 2024), Indonesia presented the Subak as a source of national pride under the theme "Water for Well-being." This subject highlights the importance of inclusive engagement by various stakeholders in the stewardship of water resources. This method, grounded in ecological values and traditional Balinese collaboration, aligns with the ideals of sustainable development, which seek to harmonise social well-being with environmental care.

The Tri Hita Karana philosophy in the Balinese context emphasises the importance of harmony among three key elements: the relationship between humans and God (*parahyangan*), interactions among individuals (*pawongan*), and the connection with nature (*palemahan*). This framework provides a robust ethical foundation that aligns closely with the principles of sustainable development. The Subak system, designated

by UNESCO as a world heritage site, serves as a clear illustration of the application of Tri Hita Karana in the management of water resources. This philosophy emphasises that development extends beyond a purely technical concern, requiring a foundation in relational ethics that ensures sustainability across spiritual, social, and ecological dimensions. The Pentahelix collaboration, grounded in the principles of Tri Hita Karana, has the potential to reconcile conflicting interests among various development stakeholders. The government serves dual roles as a regulator and protector of cosmological balance; scholars not only provide data but also animate local knowledge; the private sector must adopt ecologically-informed social responsibility; civil society emerges as an active participant rather than a mere representation of involvement; and the media acts as a steward of shared awareness. Consequently, development is now perceived not merely as economic growth, but as a concerted effort to sustain a relational equilibrium among humans, nature, and spirituality. The combination of the welfare state, pentahelix collaboration, and Tri Hita Karana values is poised to guide Indonesia towards a more equitable, sustainable, and dignified trajectory. This model operates simultaneously as an ethical framework and a technical governance strategy, effectively addressing global challenges while honouring local knowledge.

This study addresses four gaps: (i) the weak ethical grounding of pentahelix collaborations, (ii) the limited view of welfare-state functions as ecological stewardship, (iii) the symbolic—rather than operational—use of Tri Hita Karana, and (iv) the lack of comparative, multi-case evidence and metrics in Bali. Accordingly, we (1) derive THK-based governance criteria and actor roles; (2) assess how regulatory, fiscal, and service instruments support or hinder THK-aligned collaboration; (3) compare Subak, water-energy, and tourism cases on legitimacy, compliance, and equity; and (4) propose actionable design principles and indicators. This study is guided by two integrated questions. First, how can Tri Hita Karana be applied to clearly defined governance criteria that can be implemented by pentahelix actors, and how do welfare state instruments enable or constrain such operationalization?

Methodology

Research Design

The study employs a qualitative design grounded in interpretive and constructivist paradigms. An interpretive case study approach was employed to analyze the operationalization of Tri Hita Karana in environmental governance and socio-economic development. This approach allows an in-depth exploration of meanings, institutional interactions, and relational ethics underlying governance practices in Bali. The case study framework was selected because Bali provides a living example where indigenous philosophies, welfare-oriented policies, and multi-actor collaboration coexist and sometimes conflict.

Case Selection

Bali was purposively chosen as the primary study area due to its deep-rooted application of Tri Hita Karana in daily life and public policy. Within Bali, three interrelated cases were examined:

1. Subak Irrigation System – representing community-based water management rooted in Tri Hita Karana values.
2. Water-Energy Security Programs – illustrating state and corporate engagement in sustainable resource governance.
3. Tourism Development Dynamics – highlighting tensions between economic growth, social equity, and environmental preservation.

These cases collectively demonstrate how Tri Hita Karana informs collaboration across government, business, academia, civil society, and media, the five pillars of the Pentahelix model.

Data Collection

Data were collected through a combination of document analysis, semi-structured interviews, and field observations. Document analysis included government policy documents, regional regulations, UNESCO reports, CSR project evaluations, and academic literature on Tri Hita Karana and sustainability in Indonesia. Interviews were conducted with key stakeholders, including local government officials, Subak leaders, business representatives, academic experts, members of community-based organisations, and journalists. Field observations were carried out in selected Subak areas and community tourism projects to understand everyday practices and governance interactions.

Data Analysis

All qualitative data were analyzed using thematic analysis guided by three analytical dimensions derived from Tri Hita Karana:

Parahyangan – spiritual and ethical relations;
Pawongan – social and institutional relations;
Palemahan – ecological and material relations.

Thematic coding was carried out iteratively in NVivo, enabling the identification of patterns across cases related to welfare policies, multi-actor collaboration, and sustainability practices. Triangulation across interviews, documents, and field notes enhanced validity and reduced interpretive bias.

Pentahelix at the Crossroads: Between Regulation, Welfare, and Field Reality

Regulatory and Welfare State Tensions

The implementation of environmental legislation and welfare state theory within the Pentahelix framework poses several significant obstacles. Conflicting interests among stakeholders often hinder the formation of effective collaborative synergy. The business sector often prioritises economic profit, but communities underscore the significance of ecological sustainability. An evident illustration exists in Brazil, where the proliferation of agriculture jeopardises local water resources, inciting community protests that are often overlooked by the authorities (Martinelli *et al.*, 2010; Nunes *et al.*, 2022; Volken *et al.*, 2022).

Secondly, gaps in technical proficiency and financial resources — especially in poor nations — constrain the efficacy of collaborative initiatives. In Indonesia, numerous locations lack sufficient hydrologists and effective water quality monitoring systems, resulting in the formulation of policies based on inadequate data. Third, Weak enforcement enables firms to extract water with minimal oversight and accountability, exemplified by the persistent industrial contamination of the Citarum River (Natalis *et al.*, 2025).

Environmental legal theory emphasises the necessity for more robust regulatory structures and enhanced public involvement to tackle these concerns. The Pentahelix concept illustrates that community involvement in project monitoring and assessment is a crucial protection. The welfare state perspective emphasises the significance of education and empowerment in cultivating environmental literacy. An exemplary case is the *Dutch Ruimte voor de Rivier* ("Room for the River") initiative, which integrates technical engineering with public participation in spatial design (Busscher *et al.*, 2019; Klijn *et al.*, 2013; Verweij *et al.*, 2021).

The Pentahelix model structures collaboration among the government, the business sector, universities, communities, and the media in managing water resources in Indonesia. The significance becomes more apparent when examined through the integrated perspectives of environmental law and welfare state theory. Despite Indonesia's numerous issues, including river pollution, drought, and disputes over water access. The legal framework for environmental protection is defined in Law No. 32 of 2009 on Environmental Protection and Management and Law No. 17 of 2019 on Water Resources, both of which uphold the principle of the public trust doctrine. This principle outlines the state's responsibility to manage water resources for the public benefit. Nonetheless, implementation frequently contradicts immediate economic goals, especially those motivated by industrial growth. In contrast, welfare state ideas are codified in Article 33 of the Indonesian Constitution, which emphasises the state's control over natural resources to promote citizens' well-being. In this setting, the Pentahelix model facilitates the integration of various frameworks, with environmental legislation ensuring regulatory control and the welfare state ensuring equal resource allocation.

When viewed as an integrated multilevel and multisectoral framework, the Pentahelix model inherently carries ethical and value-based implications. In the Balinese setting, its efficacy depends not only on procedural efficiency or formal stakeholder involvement but also on the profound relational ethics that uphold social harmony. The Tri Hita Karana philosophy highlights the harmony between humans and God (*parahyangan*), among humans (*pawongan*), and between humans and nature (*palemahan*), and functions as more than a mere symbolic story for development initiatives. Instead, it offers a foundational ethical framework for collaboration.

The Subak irrigation system exemplifies codified indigenous governance, where participation (paruman/krama meetings), accountability (awig-awig sanctions), transparency (public ritual-allocation calendars), compliance/monitoring (collective canal inspections), and equity (rotational turns that protect downstream users) are institutionally embedded (Melsom, 2024; Norken, 2019; UNESCO World Heritage Centre, 2012). Pentahelix collaboration succeeds when government, community, firms, universities, and media align to co-design water rules, disclose extraction/effluent data,

and enforce sanctions; it fails where land conversion and project approvals outpace monitoring and disclosure, eroding local consent and equity. According to Wahana Lingkungan Hidup Bali, pressures are evident: in 2018, five of 1,596 Subak units were recorded as lost, and remaining rice paddies totalled approximately 69,000 ha (Samudero, 2024), underscoring conversion risks and enforcement gaps. Stakeholder involvement is evident: the corporate sector and academia contribute through irrigation technology and spring revitalisation, while the media raises awareness about water privatisation and community opposition. The challenge of revitalising Subak management highlights the conflict between modernisation and the preservation of traditional practices.

Tri Hita Karana's Mediating Role

Ultimately, Tri Hita Karana closely connects with the Sustainable Development Goals (SDGs), providing a contextual framework that integrates indigenous wisdom with global environmental initiatives. The three core values — parahyangan, pawongan, and palemahan —serve as ethical foundations for understanding the relationship between Pentahelix partnership and the welfare state, ensuring that development is both equitable and environmentally sustainable.

Parahyangan emphasises spiritual relations between humans and the divine, whereas pentahelix collaboration should ideally incorporate an acknowledgement of the spiritual dimension in the management of water and environmental resources. Decision-making must take into account sacred sites, local rituals, and ecological religious values, which cannot be solely evaluated through economic factors. Construction of the N2S Hotel illustrates significant neglect of spiritual-ecological values associated with local water sources associated with the landscape and local water sources, indicating a deficiency in this aspect of the ongoing pentahelix collaboration. The actions of state and business entities are driven by profit and loss assessments that overshadow local cosmological perspectives.

In the *pawongan* dimension, which regulates human interactions, it becomes evident that collaboration lacking a foundation in local collective values is likely to result in social disconnection. Numerous field studies indicate that the development of the tourism sector in Bali frequently results in local communities losing their land, losing access to water, and undergoing significant transformations in their identity and social structure. The Pentahelix collaboration that is not grounded in the pawongan ethos risks producing socially exclusionary outcomes risks evolving into a new type of exclusion. In this scenario, the community may be invited merely as a symbolic gesture, rather than being recognised as equal ethical participants in the negotiation of space and resources.

Palemahan, the connection between humans and nature, represents a critical aspect of the water crisis and environmental governance. This is where pentahelix collaboration must exhibit its ecological focus concretely, not just through greening initiatives or the creation of sustainable technology, but by fundamentally rethinking the relationship between humans and nature. Viewing through the lens of Tri Hita Karana, nature is conceptualised as an active relational entity with intrinsic value rather than a passive resource. Every water extraction, alteration of land contours, and significant building

construction must be grounded in a thorough understanding of ecological balance. In Nusa Dua, the situation contrasts sharply: nature is diminished to merely an aesthetic setting for high-end tourism, prioritising market aesthetics over relational dynamics.

To ensure that pentahelix collaboration serves as a model that is both technically effective and ethically sound, it is essential to utilise the values of Tri Hita Karana as a foundational framework for understanding and evaluation. The state functions not merely as a regulator, but also as a protector of cosmological balance. Business actors require more than just the label of green investors; they must engage in a profound commitment to the land they occupy. Academics must go beyond merely providing data; they should also work to rejuvenate local knowledge that has been sidelined. Civil society serves not merely as an addition to procedural participation; it embodies the legacy of a dynamic ecological ethic. The media act not only as communicators but also as guardians of collective environmental awareness regarding values that face potential erosion due to developmental colonisation. Positioning Tri Hita Karana as a core value in pentahelix collaboration reframes development from merely accumulating infrastructure and capital to emphasising the practice of relational sustainability. The success of development should not be evaluated solely by economic growth or investment; instead, it must also consider the preservation of spiritual, social, and ecological balance, which has historically underpinned the livelihood of the Balinese people. The concept of welfare, in relation to the state, encompasses a broader scope: it extends beyond merely ensuring basic needs to include a comprehensive interconnectedness with others, the natural environment, and a higher power.

Tri Hita Karana as the Ethical Spirit of Welfare State Integration and Pentahelix Collaboration

The figure above highlights the critical significance of preserving local values, especially the principle of Tri Hita Karana, which stresses the balance among humankind, nature, and spirituality (Adityanandana and Gerber, 2019; Anggana *et al.*, 2022; Natalis *et al.*, 2023). The pentahelix model operationalizes collaboration among five key actors: government, business, academia, communities, and the media, each of which contributes distinct but complementary functions to support sustainable and ethical development. Government provides regulations, welfare instruments, and law enforcement; business implements environmentally responsible operations and transparent resource use; academia provides scientific evidence and revitalizes local knowledge; communities assert customary rights and monitor ecological impacts; and the media ensures transparency and public awareness. When aligned with the ethical principles of Tri Hita Karana, these actors collectively maintain spiritual, social, and ecological harmony, enabling development that is legitimate, just, and ecologically balanced.

This perspective aligns with integrative ecological frameworks supporting contemporary environmental justice theory. In practice, academic viewpoints are often disregarded in regional legislative procedures that favour short-term investment interests. These tendencies underscore a continual disparity between scholarly objectives and policy implementation wherein political decisions frequently prioritise quick economic gains over long-term ecological sustainability. The situation of Hotel N25 exemplifies the necessity for collaborative governance based on principles of fairness. Strengthening

mechanisms such as independent environmental audits, multi-stakeholder forums, and community complaint systems is crucial for fostering an ecosystem of environmental democracy. Consistent application of the polluter-pays principle is essential, requiring developers to perform environmental restoration measures and provide social recompense to impacted communities. Thus, environmental responsibility can be perceived as a tangible obligation rather than just an abstract commitment.

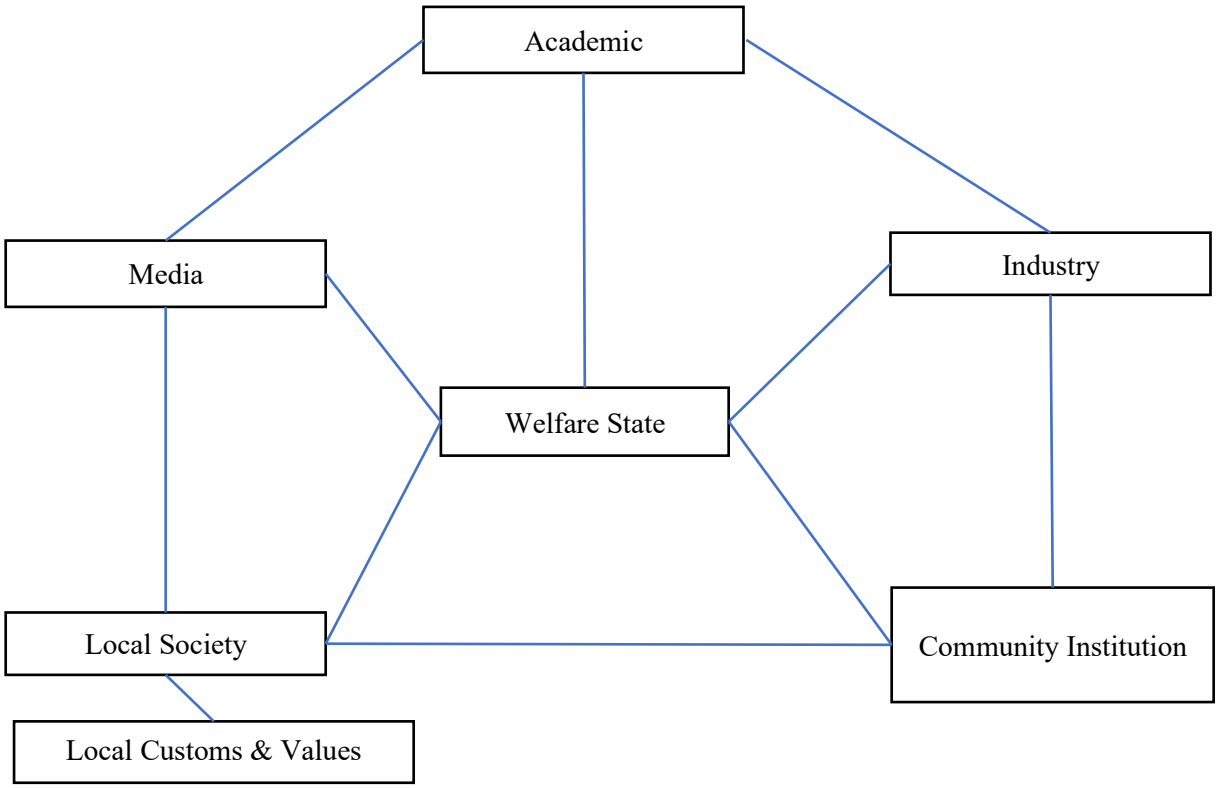

Figure 1: Conceptual model of welfare-state integration and pentahelix collaboration grounded in local wisdom values.

The effective amalgamation of welfare state principles and environmental law in tourism development, as demonstrated by the Hotel N25 example, is contingent upon the political resolve to harmonise economic expansion with ecological preservation and social equity (Brisbois and de Loë, 2016b, 2016a). The Pentahelix model of partnership, which encompasses government, academia, the commercial sector, civil society, and the media, must transcend mere rhetoric. It necessitates the creation of fair, transparent, and enforceable policy frameworks rooted in environmental rights.

A further example concerns water-resource governance around the construction of Hotel N2S in Bali, highlighting the complex interaction between economic aspirations, environmental conservation, and the potential marginalisation of indigenous values. Extensive tourism infrastructure initiatives like N2S sometimes prioritise foreign investment and international acclaim, neglecting the ecological and cultural aspects of local communities. Bali embodies a significant philosophical framework articulated through the wisdom of Tri Hita Karana, emphasising three harmonies: the connection

between humans and the divine (*parhyangan*), interpersonal relationships among humans (*pawongan*), and the interaction between humans and the environment (*palemahan*) (Tripayana *et al.*, 2024).

This approach establishes the role of the Government within the Pentahelix architecture. Anchoring development in Tri Hita Karana facilitates the amalgamation of welfare state principles with multi-actor collaboration, transcending a limited technocratic framework in favour of a social practice rooted in local ethics. By internalising these ideals, tourism development can transcend mere profit generation; it can transform into a comprehensive process that preserves cultural integrity, ecological equilibrium, and community well-being.

The efficacy of this method depends on the stakeholders' combined capacity to prioritise environmental justice, community rights, and spiritual values in decision-making processes. Sustainable tourism in Bali can only be genuinely achieved by harmonising economic ambitions with ecological stewardship and cultural preservation. The Tri Hita Karana philosophy serves as both a reflection of Balinese culture and a framework for understanding ecological knowledge, emphasising the importance of relationships in the context of development ethics. In this context, development is viewed not as the extension of human control over nature, but rather as a process of existential harmonisation among all elements of life. Rather than viewing nature merely as a resource for exploitation, Tri Hita Karana emphasises that nature possesses intrinsic value and deserves respect as a subject in its own right. This represents a convergence with the fundamental concept of a genuine welfare state, which ensures not only economic well-being but also ecological sustainability and social cohesion. A welfare state is characterised not only by its statistical wealth but also by its equitable distribution of resources and its prudent management of relationships among individuals and between humanity and the natural environment.

Private Sector Responsibility should not cause alterations in water flow, significant groundwater extraction, or degradation of the catchment area in Nusa Dua, which has historically served as the hydrological buffer (Alfarisy *et al.*, 2020) for southern Bali. The local government, representing the welfare state, must prioritise not only economic growth from the tourism sector but also the maintenance of ecological balance and the promotion of social justice. The Pentahelix approach, incorporating Tri Hita Karana, has the potential to guide the government in developing policies that prioritise harmony over mere growth. An example of this policy is the spiritual-ecological zoning policy, which stipulates that regions deemed sacred or ecologically significant cannot be altered without thorough consultation with indigenous communities and careful evaluation by scholars. Local regulations informed by Tri Hita Karana values can be structured to create cross-sector participatory mechanisms within each development planning process.

The participation of academics is essential in the compilation of Environmental Impact Analyses (EIA) that extend beyond mere administrative compliance, incorporating the principles of pawongan and palemahan into their framework. Scholars have the capacity to develop policy scenarios informed by local data and traditional Balinese knowledge, which frequently aligns more effectively with the island's geohydrological conditions. Academics can play a crucial role in the integration of environmentally friendly

technologies within hotel architectural designs that embody the principle of natural balance. Instances encompass the implementation of rainwater harvesting systems, the application of wastewater treatment utilising biofiltration systems derived from indigenous flora, or the development of water absorption parks that serve dual purposes as public spiritual areas.

The management of Hotel N2S and its associated business entities has a responsibility to implement the principles of corporate social responsibility as guided by Tri Hita Karana. CSR should move beyond reputational compliance and operate as a mechanism for cultivating ecological and social reciprocity. Using palemahan as a reference indicates that the private sector must reevaluate and modify the hotel's sanitation, water consumption, and spatial planning systems to ensure they do not compromise the environment's carrying capacity. The engagement of local communities in both the design and operational processes of the hotel is essential, rather than merely a choice. This approach to cooperation transcends mere profit and loss considerations, delving into the enhancement of social capital. Companies can create community forums to serve as official partners in the development of CSR agendas and to reach consensus on program success indicators, grounded in the principles of ecological balance and community welfare.

Community Stewardship, involving traditional villages, environmental NGOs, and Balinese spiritual communities, serves as an important cultural authority that should play a central role in the development process. In the context of the Tri Hita Karana framework, it is essential to view the community not as a passive entity but as an active participant responsible for upholding the sanctity and equilibrium of its living environment. Opposition to development that harms sacred sites or interferes with traditional irrigation practices (*subak*) reflects a concern for the integrity of *palemahan*. Consequently, the Tri Hita Karana-based Pentahelix necessitates a model of authentic engagement, rather than merely a procedural licensing or deceptive public consultation. A potential policy to consider is the formal recognition of traditional villages as strategic partners with the government and private sector in the decision-making processes related to environmental governance.

Media Accountability encompasses two primary functions: it acts as a facilitator of public education and as a protector of transparency in policy matters. The media has the potential to enable dialogue across various sectors by utilising interactive digital platforms that align community aspirations with the responses of authorities. The government establishes policy direction that adheres to the principle of ecological justice, while scholars are responsible for delivering data, research, and scientific narratives that can be converted into policies grounded in Tri Hita Karana. The private sector bears the responsibility for the ecological consequences of its business activities and should utilise CSR as a means to enhance community engagement and protect the environment. Civil society serves as a protector of cultural values and facilitates participation, whereas the media operates as a public forum that informs, regulates, and mediates information. When each dimension comprehends and values local principles like Tri Hita Karana, the resulting collaboration transcends mere technical strategy, evolving into an ethical initiative aimed at fostering dignified sustainability.

The Pentahelix-based collaboration model, grounded in Tri Hita Karana, enhances the effectiveness of water policy while ensuring social legitimacy through its foundation of harmony. In this context, the N2S hotel serves not only as a business initiative but also as a delineation between two distinct viewpoints: one grounded in technocratic assessments and the other anchored in local cosmological understanding. An established understanding that economic growth and the preservation of cultural and environmental aspects are not opposing forces, but rather integral components of genuinely sustainable development practices. This creates opportunities for innovative collaborative policy frameworks like "Participatory Environmental Audits" and "Regional Harmony Forums," which encourage the equitable engagement of all Pentahelix components in alignment with local values.

Conclusion

Conventional capitalist development models frequently overlook sustainability and environmental justice considerations. The concept of sustainable development fairness necessitates a delicate balance among these fundamental pillars. This point emphasises the importance of merging the welfare state with pentahelix collaboration. The welfare state promotes the fair allocation of justice and access to fundamental necessities for citizens. The pentahelix promotes collaboration across five sectors: government, corporate sector, academia, community, and media, to efficiently and sustainably manage resources.

Integrating Tri Hita Karana into the pentahelix framework expands the welfare-state concept. The state serves as both a purveyor of public services and a guardian of values, ethics, and spirituality. Business entities are essential catalysts for economic expansion; yet, they also hold the obligation to preserve natural equilibrium and promote societal well-being. Academics function as both providers of technical knowledge and guardians of localised insights. Civil society operates as a proactive force safeguarding ecological principles, whereas the media acts not just as an information conduit but also as a guardian of collective consciousness. This approach reorients development away from technocratic accumulation toward relational sustainability that acknowledges the significance of life in all its facets. This paper contributes by transforming Tri Hita Karana from a cultural marker into enforceable governance criteria, integrating welfare state instruments with the pentahelix role, and providing comparative evidence from Bali and actionable policy tools. Thus, it shifts governance theory from actor-centered, procedural collaboration to an ethical, place-based, and instrument-driven model.

Our interpretive, Bali-focused analysis privileges depth over breadth; findings are transferable rather than statistically generalizable. Reliance on qualitative materials and selected documents may understate counter-examples, and we did not construct a full quantitative indicator set to track THK alignment over time. Evidence from Bali indicates THK-anchored policies are more legitimate, enforceable, and equitable. This interpretive, Bali-specific qualitative focus enhances contextual depth but limits statistical generalisability. Future research should examine transferability through comparative ASEAN cases, use mixed methods (ethnography + causal designs) to evaluate THK tools, build longitudinal THK indicators, and pursue action research that embeds academics with government, business, community, and media partners.

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